



MEMORANDUM

TO: Jeff Adams, Director of Information Technology

FROM: Peter M. Curry, Administrative Officer

SUBJECT: Future Town Government Network Applications

DATE: April 1, 2002

Aided by the input key administrators, I perceive that Town Government operations will need its network to support the network-based applications enumerated below in the next three to five years. If history is any guide, this is an *underassessment* because of these factors:

- New high-utility software is being developed for local government functions at a rapid rate and some, if not most, is unknown to us at this time.
- Our staff has, by working with the software systems that have been introduced at a brisk pace over the past four years, become not only computer literate, but aware of the value of such systems to improve their work processes. Whereas a preponderance of the initiative for applying new software systems has heretofore come from top management, more “demand” is expected to come from department administrators and their staffs, too.
- The arrival of a new Administrative Officer who may be an even more assertive IT change agent than the present one. The Town of Darien is not close to being at the cutting edge among municipalities in terms of using computer applications and, if the AO comes from a more computer-advanced environment, she/he may push harder for change.
- The Town has, in the past four years, put most of its technology upgrade investments into emergency services – the police, fire and emergency medical services – such as new radios, the Vision system, mobile data. With the priority needs of the emergency services addressed, IT investments in other areas may have more of a chance in getting funded. These might impact network capability to a greater degree.
- The use of application service providers (ASPs) to bring in new systems seems, at this juncture, to be a strong alternative for acquiring future applications. I see the impact on the network being mixed. The need for acquiring and maintaining

additional servers would be minimized; the need for fast and reliable internet access would be enhanced significantly.

Here are the network-based applications that are within the horizon at present:

EDMS

Workload imposed by other subjects has interfered with getting *Electronic Document Management* (EDMS) advanced. Nevertheless, this remains, in my estimation, the most important productivity improvement measure that Town government could realize from IT. In the meantime, pertinent technology has advanced rapidly and even the jargon has changed – it is now called electronic content management and embodies a concept that goes beyond documents to incorporate e-mail and internet material. EDMS/content management could be beneficially used in many, if not all Town Hall offices.

Status: Consultant to be selected; funds in place for developing plan and (hopefully) specs.

Network impact factors:

- Mass scanning of existing paper records; routine scanning of paper documents as they are sent and received.
- Sharing of textual records and material across all departments with a high degree of built-in security and segregation into who may review what.
- Powerful server (unless an ASP is used) for data storage/retrieval.
- High-rate data transmission
- Sophisticated data storage with capability for complex retrieval and data mining.

CRM

Customer Relationship Management is terminology and software that comes from the private sector. Applied to local government, it might be termed Citizen Relationship Management (CRM). Handling, tracking and responding to residents' complaints and requests for service and monitoring performance is at the heart of it for Town government, although continuing developments in software are adding functionality like links to GIS and all the geographic analysis potential that it provides. Some larger municipalities like Stamford have set up centralized call centers in which CRM systems are used, but this is not a practical approach for Darien which, it is presumed, would continue to be decentralized in terms points of citizen contact. A central database allowing information sharing and tracking would be of significant benefit in terms of service quality, however.

Status: No budget allocation. Funding target – FY 2005. New software coming to market is being randomly monitored.

Network impact factors:

- Possible separate server and related maintenance (unless ASP used).
- Data transmission related to shared database.
- Upgraded voice mail.

- Interoperability with Town website for web-entered citizen contacts.

Interactive Town Website/E-government

Within five years – and possibly quite sooner – Town government will need an interactive website by which citizens will be able to transact business with the Town including filing applications, paying for program registrations, taxes, permit fees, penalties such as parking tickets, etc. Efficiency for Town operations aside, Darien citizens who, in large numbers, routinely use the internet to conduct complex transactions, will come to expect – if they haven’t already – the convenience of performing relatively simple transactions with the Town on-line, from home or office, via the internet. The foregoing EDMS and CRM systems are considered “back office” systems that would be prerequisite to functioning with an interactive website. The Park and Recreation Department already has such capability with its *Class* system.

Status: Programmed in Six-Year Capital Expenditure Plan for funding in FY 2006.

Network impact factors:

- Vastly enhanced website.
- Significantly increased internet traffic (relative to previous Town government use).

Financial procedures impact factor:

- Credit card acceptance.

Land Use Management System

One of the prime – if not *the* prime – applications that is foreseen as running off an interactive website is land use management permitting, including the receipt of applications. This will encompass, planning applications and permits, zoning applications and permits, fire code permit filings, environmental health permits such as for wells and septic systems, sewer hookup applications, and, most importantly in terms of record keeping volume, building code permits of all types. A very significant feature of such software would be complete integration with all agencies working from a common database. Follow-up inspections of all types would be system-linked and driven. This would provide all agencies with the means to keep track of – and even coordinate – land development and building modification projects in real time. Turned-around, it will enable applicants and citizens, generally, to obtain information on the status of any application or project.

Status: Awaiting a funding opportunity. Excellent software has been developed and is available and a number of municipal websites can be accessed to get a sense of what is provided. One strong system was developed by the City of Sunnyvale, CA, which has formed a partnership with a commercial firm to market ASP services.

Network impact factors:

- ASP service has attractive advantages, so a local server base should not be a factor.
- Serious step-up in internet use in Town agency-to-ASP and public-to-website link-to-ASP communications.
- Regular replacement/upgrade of desk-top units as now programmed should provide desk-top capacity to handle software.
- A lash-up with the GIS system should be a given in setting up software of this type.
- The further possibility of using GPS to tie permitting and inspections with GIS should be a distinct possibility by the time the Town gets to implementing this software.

Mobile Data

So far, consideration of mobile data technology has been almost exclusively concentrated on police applications. However, the Police Mobile Data project should be looked at as the *initial* wide-scale application of mobile data technology, although the very first for the Town was actually the use of personal data appliances (PDAs) in writing parking tickets. There will be many more applications to come. Mobile laptops and PDAs in various forms will become common tools for field personnel. Any good land use permitting suite (as discussed above) will also afford mobile data capability for the Zoning Compliance Officer, the Building Official, the Fire Marshal, the Environmental Health Inspector, etc. Not to be overlooked is potential use by the Department of Public Works and the Department of Parks and Recreation for field inspections and work order information and the Tax Assessor for recording data during field surveys. It should be noted that the DPW already has a sophisticated database pertaining to road conditions and maintenance programming and keeping it current will warrant high priority consideration for putting mobile data capability into the hands of its personnel. Sewer inspection and the advanced preventive maintenance for sewerage facilities that the DPW has planned will produce additional need for hand-held, GPS connected equipment.

Status: Funding in future fiscal year(s); to be addressed initially in FY 2004, hopefully.

Network impact factors:

- Maintenance of PDA's and GPS equipment.
- Mobile data server(s) possibly needed.
- Wireless technology training imperative for tech engineers.

GIS

The Geographic Information System is certainly not new. Nevertheless, its consideration here is appropriate because it is on the threshold of far greater use – or it should be. The GIS database has great potential for use by Town agencies. However, it will not be fully utilized as an administrative tool until it is available to all departments via the Town net. This is an imperative step in the evolution of our GIS. It goes without saying that appropriate operating personnel will need training in how to use GIS. When these steps –

intranet based GIS and training in its use – have been accomplished, there will seemingly be an impact on network requirements.

Status: Database exists and resides on Planning & Zoning Department workstation. Applications usable by various departments need to be added and related modifications made.

Network impact factors:

- Database must be made more “user-friendly” for departments.
- Database made to reside on a network server with applications available to departments.
- Read-only restrictions and use protocols must be worked out and implemented.

Darien Facility Access Card System

Even in the near-term, the Town should consider installing a card access system to allow use of town facilities. With such a system, permits and “stickers” would be replaced by the issuance of plastic “smart” cards to citizens that would, through data correspondence with a server, admit those who qualified by payment of fees or otherwise. Identification stored in the card would enable the server-based software to determine when and if access was authorized based on Darien residency, pre-payment of fees, or the establishment of a credit card account. To understand the concept, think in terms of “E Z Pass”. The payback period on investment in such a system would be short just considering that the > \$65,000 now being spent for 3 months of gate guard service at the beaches would be saved. In addition, these are a few of the other potential applications: boat launch control, paddle tennis time, refuse disposal area access, refuse disposal charges, etc.

Status: Technology available.

Network impact factors:

- Possible dedicated server.
- Data transmission and linkage (could be wireless involving antenna positioning and maintenance).
- Specialized software maintenance.
- Specialized card-reader hardware maintenance.

Full Connectivity with Senior Citizen Center and Public Works Garage

Connectivity with the Senior Center and DPW Garage would be desirable to enable full use of the MUNIS system by the organizational units operating at those locations. Direct transmission of *Class* system data to and from the Parks and Grounds unit of the Parks and Recreation Department should be provided by improved connectivity with the Ledge Road garage. Improvement in e-mail communications would also be valuable to all the operations based outside the Town Hall.

Status: DPW garage has a wireless link with the Town Hall. Feasibility of intensified use needs to be assessed. Senior Center has no network connection and no internet capability, at present.

Network impact factors:

- Data transmission facilities to be established and maintained.

Migration of Tax Assessment and Collection to an Alternate System

The change to a new system for tax assessment and collection remains a possibility. Problems with the Walsh system have largely been worked out and the company has been providing better support. However, the potential risk of Walsh abandoning or selling the system remains. In addition, other systems that are in development – MUNIS, for example – may prove to offer valuable functionality for the Town.

Status: Need not urgent at present but it could become suddenly imperative.

Network impact factors:

- Replacement of server with one having different platform.
- Need for support personnel to learn new system operating system.

Town Government Intranet

Creation of a web page to serve Town government's internal needs would be a desirable enhancement to communications by and among Town officials and employees. Use and viewing would be internal only. Operating procedures, rules, regulations, administrative bulletins, notices of events, etc. would be accessible on the website.

Status: Idea stage.

Network impact factors:

- Software maintenance.
- Use instruction/support.

Ability to Access Network-Based Systems via Internet

Management level personnel should be enabled to access network-based systems while working at home or while traveling. The advantages to the Town are that management personnel could work in real time on *MUNIS* and utilize *Outlook* and other MS software when not in the office. Working at a remote location on projects requiring unbroken concentration is, by and large, more productive.

Status: Idea stage.

Network impact factors:

- Extranet linkage to be supported

Central Revenue Collection

The implementation of new land use permitting software and the adaptation of the Park & Recreation Department's *Class* system would serve to make central revenue collection feasible. Indeed, the existing network might be utilized for central collection even prior to such changes occurring. The advantages of a single locus for receiving payments of all types would be enhanced control, standardized process and procedure and accelerated deposit into interest-generating depositories.

Status: Idea stage.

Network impact factors:

- Increased network data volumes.
- Software or operating systems support.

Enhancements of Existing Systems

Although deliberately not covered in the foregoing, it should be noted that the adoption of enhancements in systems now being used by Town Government agencies will be forthcoming. These, in particular, include the *MUNIS* and *Class* systems. Features now available but not yet utilized here will be applied. Software upgrades will be accepted and put into use as the providers develop them.

c: Robert F. Harrel, Jr., First Selectman
 Selectmen
 Wally Pugh, Chairman, Information Technology Committee